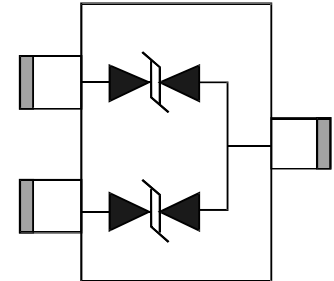


## Features

- 280W peak pulse power (tp =8/20μs)
- Bidirectional configurations
- Solid-state silicon-avalanche technology
- Low clamping voltage
- Low leakage current
- IEC 61000-4-2 ±30kV contact ±30kV air
- IEC 61000-4-4 (EFT) 40A(5/50ns)
- IEC 61000-4-5 (Lightning) 6A(8/20μs)



## Applications

- Dataline
- Automatic Teller Machines
- Net works
- Power line

## Mechanical Data

- SOT-23 package
- Molding compound flammability rating: UL 94V-0
- Packaging: Tape and Reel
- RoHS/WEEE Compliant

## Absolute Maximum Rating

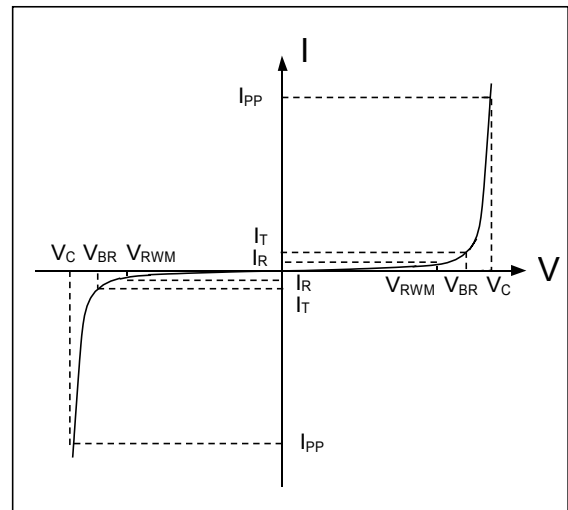
Rating	Symbol	Value	Units
Peak Pulse Power ( tp =8/20μs )	P <sub>PP</sub>	280	W
Peak Pulse Current ( tp =8/20μs ) (note1)	I <sub>pp</sub>	6	A
ESD per IEC 61000-4-2 (Air) ESD per IEC 61000-4-2 (Contact)	V <sub>ESD</sub>	30 30	kV
Lead Soldering Temperature	T <sub>L</sub>	260/10S	°C
Junction Temperature	T <sub>J</sub>	-55 to + 125	°C
Storage Temperature	T <sub>stg</sub>	-55 to + 125	°C

**Electrical Characteristics**

Parameter	Symbol	Conditions	Min	Typical	Max	Units
Reverse Stand-Off Voltage	$V_{RWM}$				24.0	V
Reverse Breakdown Voltage	$V_{BR}$	$I_T=1mA$	26.7	30.0	34.0	V
Reverse Leakage Current	$I_R$	$V_{RWM}=24V, T=25^\circ C$		0.1	0.5	$\mu A$
Peak Pulse Current	$I_{PP}$	$t_p=8/20\mu s$			6	A
Clamping Voltage	$V_C$	$I_{PP}=6A, t_p=8/20\mu s$		48	55	V
Junction Capacitance	$C_j$	$V_R = 0V, f = 1MHz$		12	15	pF

**Electrical Parameters (TA = 25°C unless otherwise noted)**

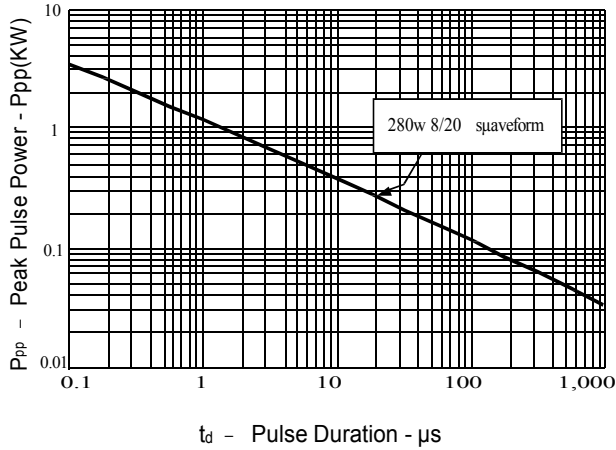
Symbol	Parameter
$I_{PP}$	Maximum Reverse Peak Pulse Current
$V_C$	Clamping Voltage @ $I_{PP}$
$V_{RWM}$	Working Peak Reverse Voltage
$I_R$	Maximum Reverse Leakage Current @ $V_{RWM}$
$V_{BR}$	Breakdown Voltage @ $I_T$
$I_T$	Test Current



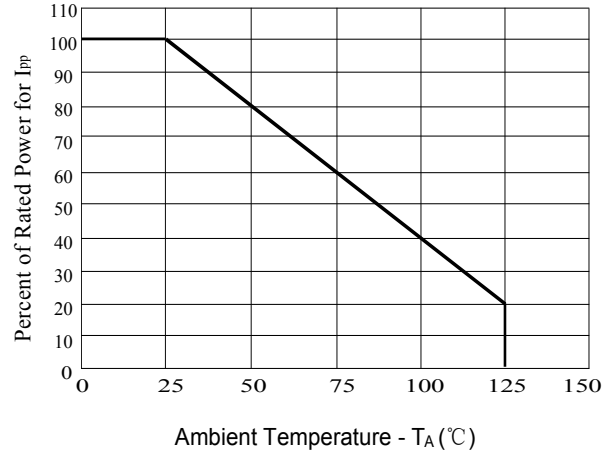
Note: 8/20 $\mu s$  pulse waveform.

**Typical Characteristics**

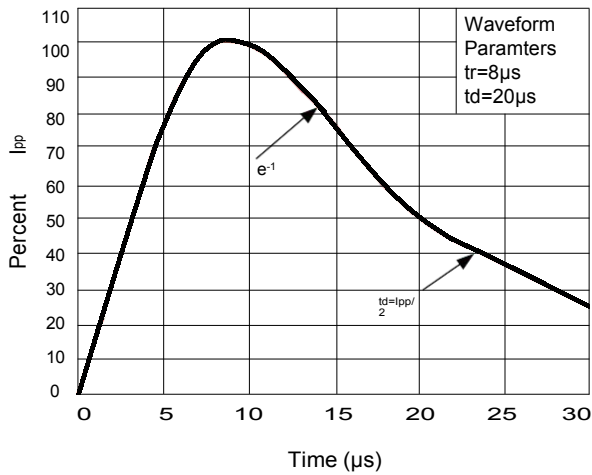
**Figure 1: Peak Pulse Power vs. Pulse Time**



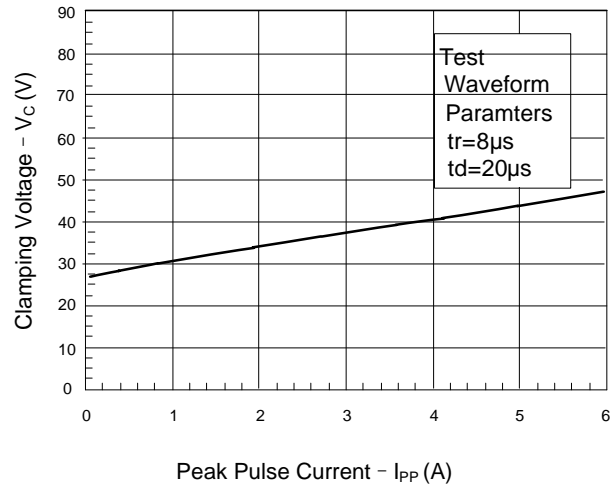
**Figure 2: Power Derating Curve**



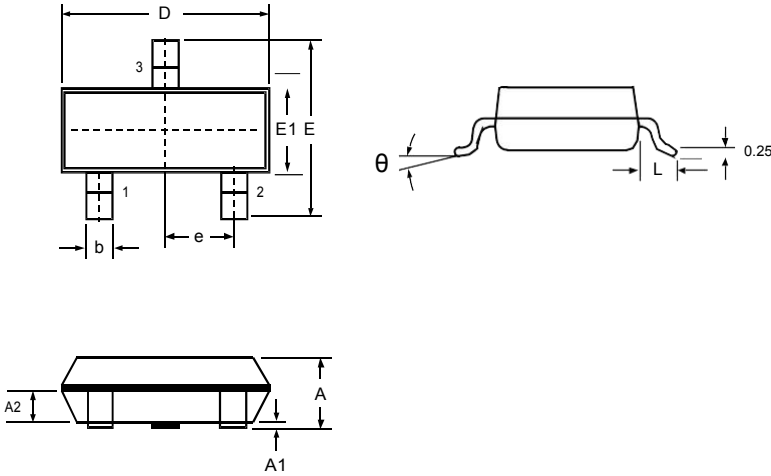
**Figure3: Pulse Waveform**



**Figure 4: Clamping Voltage vs. Ipp**

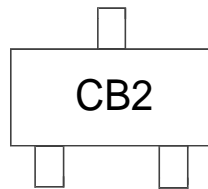


**Outline Drawing – SOT-23**



SYMBOL	DIMENSIONS			
	MILLIMETER		INCHES	
	MIN	MAX	MIN	MAX
A	0.900	1.150	0.035	0.045
A1	0.000	0.100	0.000	0.004
A2	0.900	1.050	0.035	0.041
D	2.800	3.000	0.110	0.118
b	0.300	0.500	0.012	0.020
E	2.250	2.550	0.089	0.100
E1	1.200	1.400	0.047	0.055
e	0.950 BSC		0.037 BSC	
L	0.500	0.675	0.020	0.027
θ	0	8°	0	8°

**Marking**



**Ordering information**

Order code	Package	Baseqty	Deliverymode
ESDCAN24-2BLY	SOT-23	3000	Tape and reel